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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/535,673

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Pierre Fagard

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EXAMINER

CHOW, YUK

ART UNIT

PAPER NUMBER

2629

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/535,673	<b>Applicant(s)</b> FAGARD, PIERRE	
	<b>Examiner</b> YUK CHOW	<b>Art Unit</b> 2629	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 May 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 16, the phrase "for example" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caldwell et al. (US Patent 5,572,205) in view of Troxell et al (US 2004/0080486 A1).

As to claim 1, Caldwell discloses a display device, the surface of the device being rendered touch-sensitive, the device comprising:

a first dedicated part having two insulating plates (Fig. 2(12,24)),

a layer of material exhibiting electro-optical properties (Fig. 2(23)) suitable for rendering all or part of its surface visible under the effect of an electrical control signal (see Col. 4 lines 15-30), the layer being disposed between the two plates (see Fig. 2),

at least one first electrode (Fig. 2(20)) having the shape of a pictogram (see Fig. 1(14)), the at least one first electrode being disposed on a face of one of the insulating plates (Fig. 2),

a second electrode (Fig. 2(16a)) disposed on a face of the other insulating plate (Fig. 2(24)) opposite at least one first electrode, wherein the second electrode is used as responsive element of the touch-sensitive surface of the device (see Abstract).

However, Caldwell does not teach that the surface area of the second electrode is greater than or equal to the surface area or the sum of the surface areas of the first electrode, and the surface area of second electrode is at least  $9 \text{ mm}^2$ .

Troxell discloses a transparent overlay input device, wherein teaches the surface area of a second electrode (Fig. 4(414)) is greater than the sum of the surface area of first electrode (Fig. 4(408A)) and a typical electrode may be approximate the size of fingertip,  $1.3 \text{ cm}^2$  [0036].

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to design the variations in electrode pair geometries, in order to achieve variations in sensing sensitivity (see Troxell [0037]), and to design electrode size to be at least  $9 \text{ mm}^2$  for a touch sensitive application due to practical reason as suggested as well by Troxell in [0036].

As to claim 2, Caldwell and Troxell disclose a device as claimed in claim 1, wherein the first electrode is fed electrically by a pad in that the second electrode is profiled opposite the pad (See Troxell Fig. 6, all electrode are electrically connected by pads).

As to claim 3, Caldwell and Troxell disclose a device as claimed in 1, wherein it comprises several second electrodes, and in that each second electrode is fed separately (see Troxell Fig. 6 all second electrodes are fed separately).

As to claim 4, Caldwell and Troxell disclose a device as claimed in claim 1, wherein the pattern of the second electrode covers substantially a circle of at least 9 mm in diameter (see Troxell Fig. 1(106) also see [0036]).

As to claim 5, Caldwell and Troxell disclose a device as claimed in claim 1, wherein it comprises a second non-dedicated part (see Troxell Fig. 5(502-512), see [0032]).

As to claim 6, Caldwell and Troxell disclose a device as claimed in claim 5, wherein the second non-dedicated part is arranged in the form of a matrix with row-wise and column-wise addressing (see Troxell Fig. 5 (502-512) forms 2x3 matrix).

As to claim 7, Caldwell and Troxell disclose a device as claimed in claim 2, wherein it comprises several second electrodes, and in that each second electrode is fed separately (see Troxell Fig. 6).

As to claim 8, Caldwell and Troxell disclose a device as claimed in claim 2, wherein the pattern of the second electrode covers substantially a circle of at least 9 mm in diameter (see Troxell [0036]).

As to claim 9, Caldwell and Troxell disclose a device as claimed in claim 3, wherein the pattern of the second electrode covers substantially a circle of at least 9 mm in diameter (see Troxell [0036]).

As to claim 10, Caldwell and Troxell disclose a device as claimed in claim 2, wherein it comprises a second non-dedicated part (see Troxell Fig. 5(502-512), see [0032]).

As to claim 11, Caldwell and Troxell disclose a device as claimed in claim 3, wherein it comprises a second non-dedicated part (see Troxell Fig. 5(502-512), see [0032]).

As to claim 12, Caldwell and Troxell disclose a device as claimed in claim 4, wherein it comprises a second non-dedicated part (see Troxell Fig. 5(502-512), see [0032]).

As to claim 13, Caldwell and Troxell disclose a device as claimed in claim 1, wherein the electrical control signal comprises a first electrical signal and which further comprises a second a second electrical signal which is applied to one of first and second electrodes and which is configured to enable proximity detection of a digit by capacitive effect (see Troxell [0008]).

As to claim 14, Caldwell and Troxell disclose a device as claimed in claim 13, wherein the first signal is low frequency signal (Caldwell Fig. 4(40)) and the second signal is a high frequency signal (see Caldwell Fig. 4(34)).

As to claim 15, Caldwell and Troxell disclose a device as claimed in claim 13, wherein the first signal is low frequency signal of about 100 Hz and the second signal is a high frequency signal of about 2MHz (low frequency and high frequency could have been a design choice).

As to claim 16, Caldwell and Troxell disclose a device as claimed in claim 13, wherein application of a high frequency second electrical control signal, for example 2 MHz, onto the second electrode 7, enables detection of the digit by analyzing a change in the high frequency signal in the second due to an existence of a capacitance created between the digit and the second electrode (See Caldwell Col. 5 line 9 – Col 6 line 3 and Fig. 4).

As to claim 17, Caldwell and Troxell disclose a device as claimed in claim 16, wherein the digit comprises a finger (see Troxell's Abstract).

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YUK CHOW whose telephone number is (571)270-1544. The examiner can normally be reached on 8-6 M-TH E.T..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on 571 272-7674. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2629

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Y. C./

Examiner, Art Unit 2629

/Amare Mengistu/

Supervisory Patent Examiner, Art Unit 2629